

Advanced Wireless Flight Sensor System

Completed Technology Project (2016 - 2017)



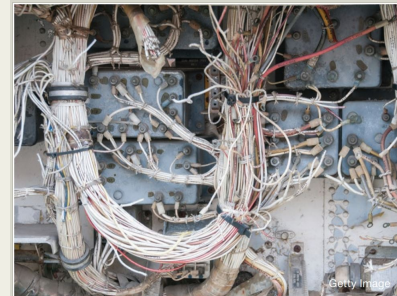
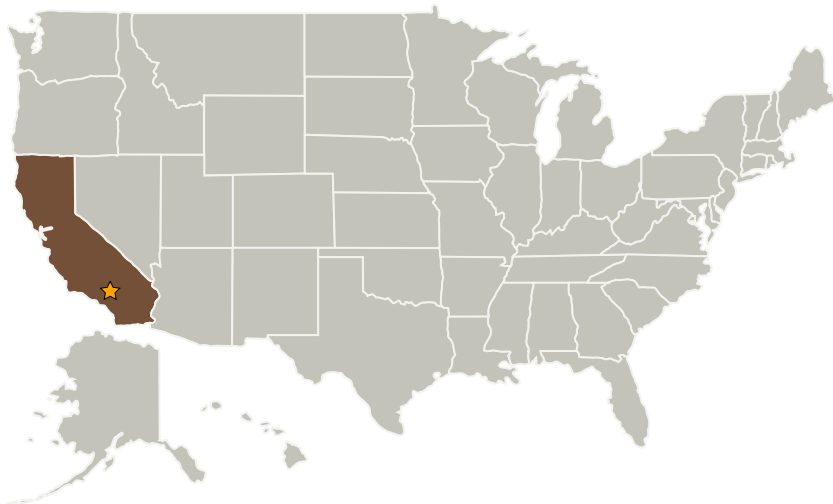
Project Introduction

Other wireless systems concentrate on the sensor and not the challenges of data synchronization, throughput, and spectrum that are involved in an Aerospace vehicle. The innovation is to work with our partners and develop a wireless system that is sensor agnostic and be able to overcome the challenges identified.

Anticipated Benefits

Wireless systems lack sufficient network time synchronization. Compromise between operational life (i.e. power use) and data throughput. Don't address the spectrum compliance needs of aerospace applications. Aerospace vehicles lack instrumentation networks that can accommodate wireless technology

Primary U.S. Work Locations and Key Partners



Researchers at Armstrong are developing a wireless flight sensor system that eases integration of wireless sensors into existing avionics.

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Organizations Performing Work	Role	Type	Location
★Armstrong Flight Research Center(AFRC)	Lead Organization	NASA Center	Edwards, California

Primary U.S. Work Locations

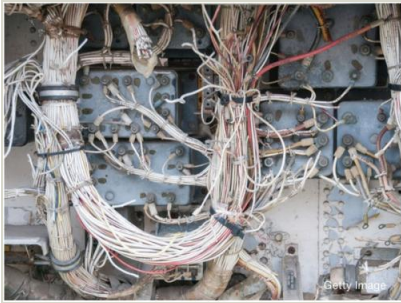
California

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Images



Project Image

Researchers at Armstrong are developing a wireless flight sensor system that eases integration of wireless sensors into existing avionics.

(<https://techport.nasa.gov/image/35786>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Armstrong Flight Research Center (AFRC)

Responsible Program:

Center Innovation Fund: AFRC CIF

Project Management

Program Director:

Michael R Lapointe

Program Manager:

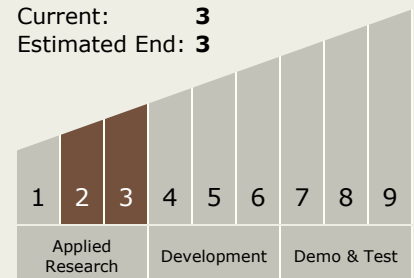
David F Voracek

Principal Investigator:

Matthew R Waldersen

Technology Maturity (TRL)

Start: 2
Current: 3
Estimated End: 3



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Technology Areas

Primary:

- TX02 Flight Computing and Avionics
 - └ TX02.1 Avionics Component Technologies
 - └ TX02.1.8 Wireless Avionics Technologies

Target Destination

Earth